Correspondence

Comments on "Miniaturized Wilkinson Power Dividers Utilizing Capacitive Loading"

Joe Staudinger

I respectfully point out what seem to be errors in the manuscript.[1] For the circuit topology shown in Fig. 1, an *even–odd mode analysis* shows that the conditions necessary to achieve zero reflection for all three ports and infinite isolation between ports 2 and 3, requires the value of C_2 to be twice $C_1(C_1 = 2C_2)$. This relationship is shown reversed in the manuscript. Secondly, derivation of (2) by assuming all three ports are equally terminated by impedance Z_o, requires C_1 to take the form

$$C_1 = \frac{\sqrt{2}\cos(\beta_o l)}{\omega_o Z_o}.$$

Thus, entries listed in Table I for C_1 are incorrect.

[1]M. Scardelletti, G. Ponchak, T. Weller, *IEEE Microwave Wireless Compon. Lett.*, vol. 12, pp 6–8, Jan. 2002.

Author's Reply

M. C. Scardelletti

We respectively appreciate the comments of Dr. Staudinger regarding errors in the above paper. He is correct that C_2 must equal $C_1/2$ whereas in the paper C_2 was expressed as being equal to $2C_1$. The equation given by Dr. Staudinger for C_1 is also correct. Equation (2) of the paper should be

$$C_2 = \frac{\cos(\beta_O \cdot l)}{\omega_O \cdot Z_O \cdot \sqrt{2}}$$

and the heading for column 2 of Table I should be C_2. We have verified that the values listed in column 2 of Table I are correct with the change in heading, and the correct equations were used in the design of the miniaturized Wilkinson power dividers. Lastly the errors in typing the manuscript do not alter the results and discussions offered in the paper.